JVC

SERVICE MANUAL

MODEL JT-V71

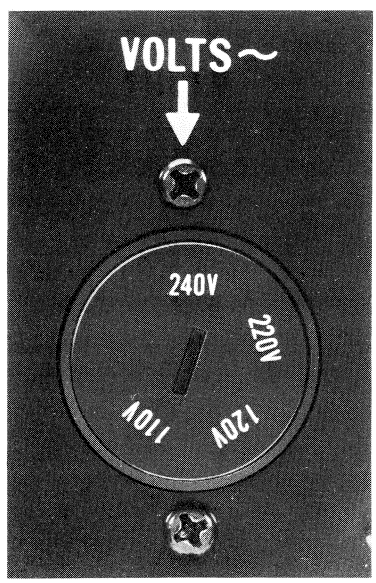
STEREO TUNER

No. 2366
FEB 1976

Contents

Page

1. Specifications 2
2. Removal of Top Cover and Bottom Plate 3
3. Main Parts Location and Part Numbers 4
4. Dial Stringing Procedure 4
5. Exploded View and Parts List
   - 5-(1) Front Panal 5
   - 5-(2) Rear Panel 7
6. FM/AM Tuner Alignment Procedure
   - 6-(1) AM Section 9
   - 6-(2) FM Section 9
7. Circuit Board Ass'y and Parts List
   - 7-(1) TFM-910GUA1 FM/AM Tuner C.B. Ass'y 11
   - 7-(2) TAD-167C Post Amp. C.B. Ass'y 16
   - 7-(3) TPS-54A Power Supply C.B. Ass'y 19
   - 7-(4) TSC-53A Switch C.B. Ass'y 21
   - 7-(5) TSC-52A Switch C.B. Ass'y 21
8. Packing Materials List 22
9. Accessories List 24
10. Schematic Diagram 24
11. Parts List with Specified Numbers for Designated Areas 24



This SET is switchable between line voltages of 110, 220 and 240 volts AC, 50/60Hz.
The change-over switch is placed on the rear panel of the set.
To select another voltage, turn the change-over switch with a screwdriver or coin.

1. Specifications

FM Tuner Section

Tuning Range		: 88MHz – 108MHz
Usable Sensitivity		: 1.8μV
50dB S/N Sensitivity	Mono	: 3.8μV
	Stereo	: 38μV
Signal to Noise Ratio	Mono	: 75dB
	Stereo	: 68dB
Distortion at 1kHz		: 0.1% (Mono and Stereo)
at 10kHz		: 0.15% (Mono), 0.45% (Stereo)
at 100Hz		: 0.1% (Mono and Stereo)
Capture Ratio		: 1.0 dB
Alternate Channel Selectivity		: 75dB
Image Rejection		: 90dB
IF Rejection		: 95dB
Spurious Rejection		: 95dB
AM Suppression		: 50dB
Stereo Separation at 1kHz		: 50dB
at 10kHz		: 40dB
at 100Hz		: 45dB
Sub Carrier Rejection		: 68dB
SCA Carrier Rejection		: 70dB
Stereo Threshold Level		: 4μV, 32μV
Muting Threshold Level		: 4μV, 32μV (Mono and Stereo)
Frequency response		: 30Hz – 14kHz ±0.5dB
		20Hz – 15kHz $^{+0.5}_{-2.5}$ dB
De-emphasis		: 75, 50, 25μsec. switchable inside
Output Level (Re: 400Hz, 75kHz dev.)		
Variable out		: OV – 1.3V
Fixed Out		: 750mV
Detector Out		: 160mV
Antenna Input Impedance		: 300Ω balanced
		: 75Ω unbalanced

AM Tuner Section

Tuning Range	: 525kHz – 1605kHz
Usable Sensitivity	: 300μV/m (bar antenna)
	: 50μV (ext. antenna)
Total Harmonic Distortion	: 0.5%
Signal to Noise Ratio	: 50dB
Selectivity	: 30dB
Image Rejection	: 45dB
Output Level (Re: 400Hz, 100% mod.)	
Variable Out	: OV – 1.0V
Fixed Out	: 500mV
Antenna	: Built-in ferrite core bar ant. and External antenna terminal

Power Source : 110/120/220/240V, 50/60Hz

Power Consumption : 9 watts

Dimensions

Height	: 6-3/8 inch (16.2cm)
Width	: 16-1/2 inch (42.0cm)
Depth	: 14-1/4 inch (36.1cm)

Weight

Net	: 15.4 lbs. (7.0kg)
Gross	: 18.0 lbs. (8.2kg)

2. Removal of Top Cover and Bottom Plate

Procedure and Part Numbers

1. Remove 4 screws (Item No. 10B) through the both sides of the top cover (Item No. 10).
2. Remove the top cover.
3. Remove 6 screws (Item No. 88B) from bottom plate (Item No. 88) and remove the bottom plate from the chassis.

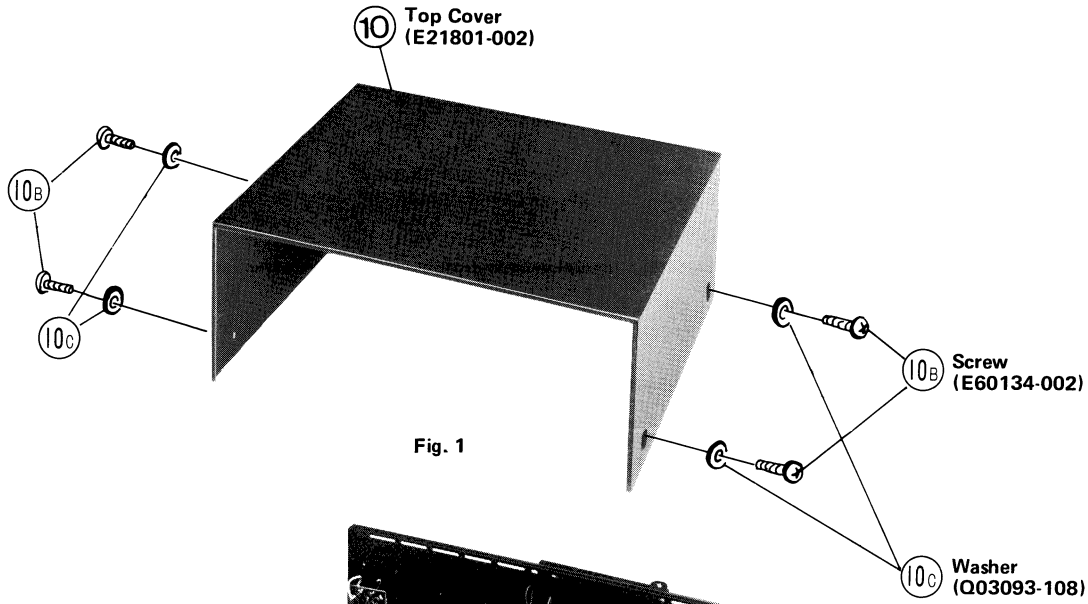


Fig. 1

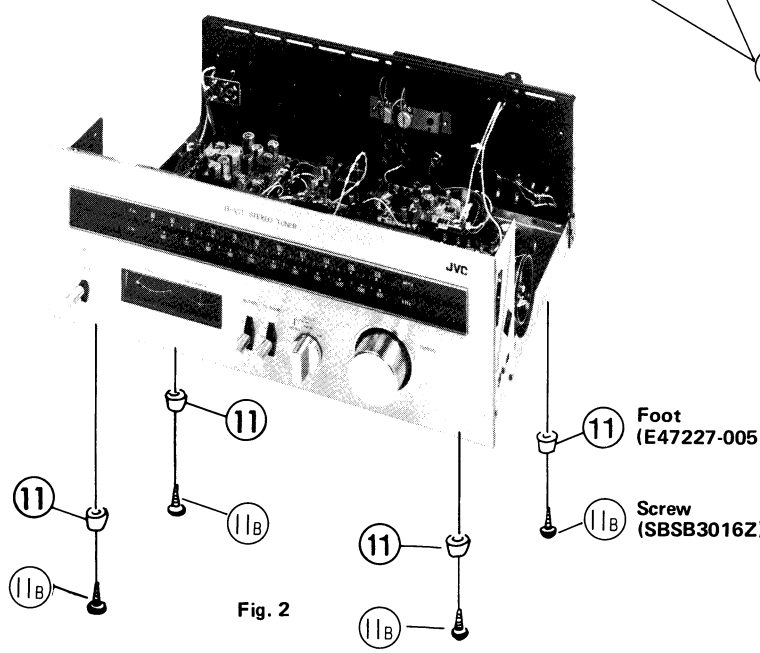


Fig. 2

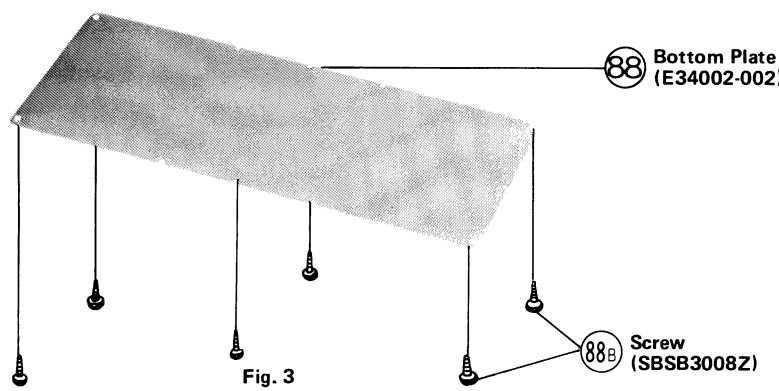
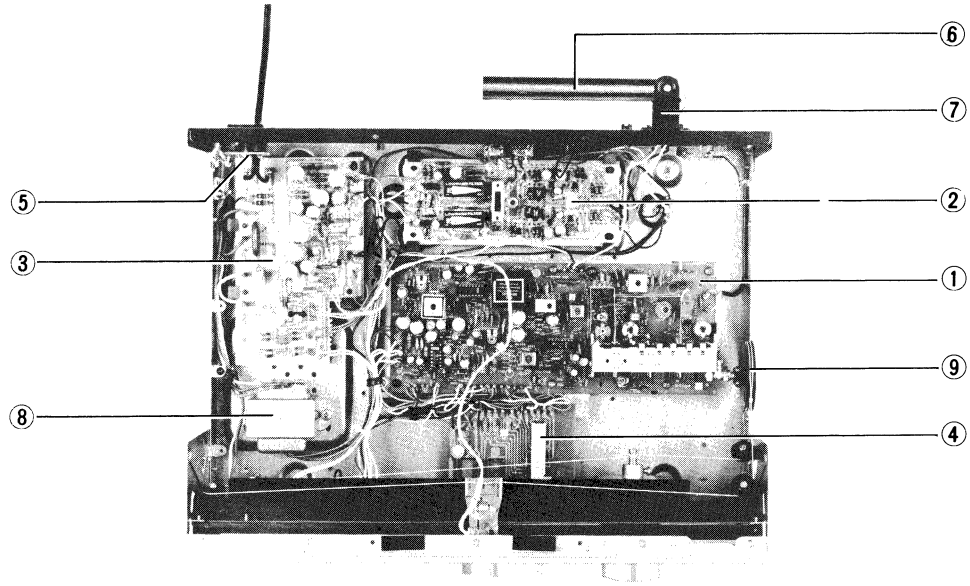


Fig. 3

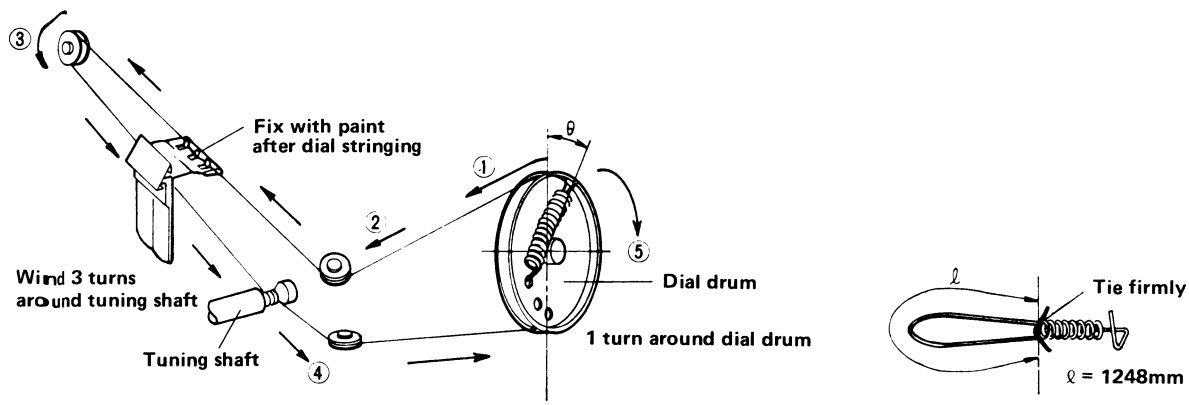
3. Main Parts Location and Part Numbers



Item No.	Part Number	Rating	Description	Q'ty
1	TFM-910GUA1		FM Tuner C.B Ass'y	1
2	TAD-167C		Post Amp C.B Ass'y	1
* 3	TPS-54A		Power Supply C.B Ass'y	1
4	TSC-53		Switch C.B Ass'y	1
* 5	TSC-52		Switch C.B Ass'y	1
6	E03037-31UD		Bar Antenna Coil	1
7	E49695-002		Bar Antenna Bracket	1
* 8	E03042-15F		Power Transformer	1
9	QZD1208-002		Dial Drum	1

* Differrent in different areas. Refer to page 24.

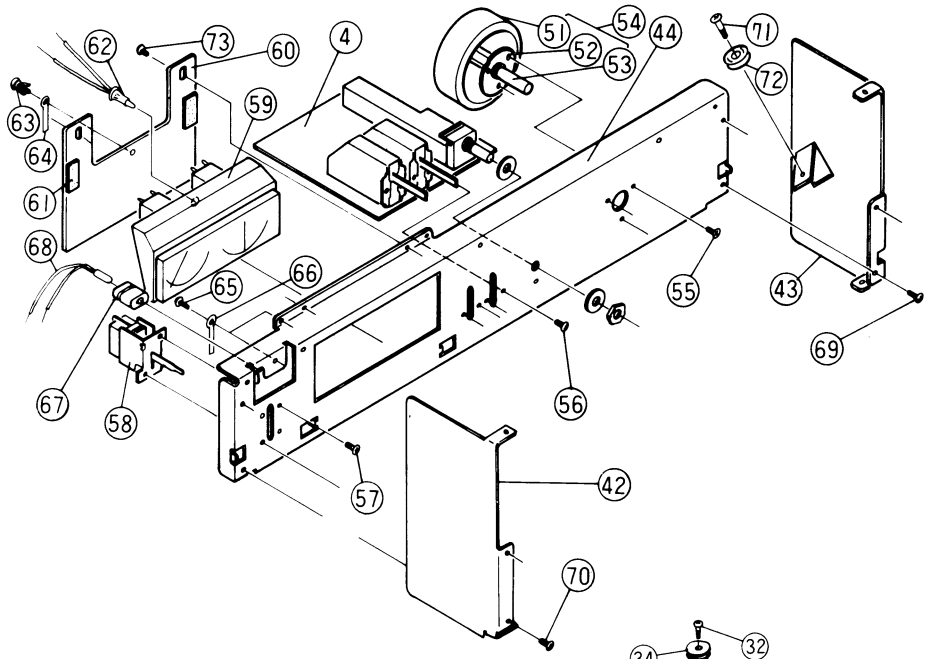
4. Dial Stringing Procedure

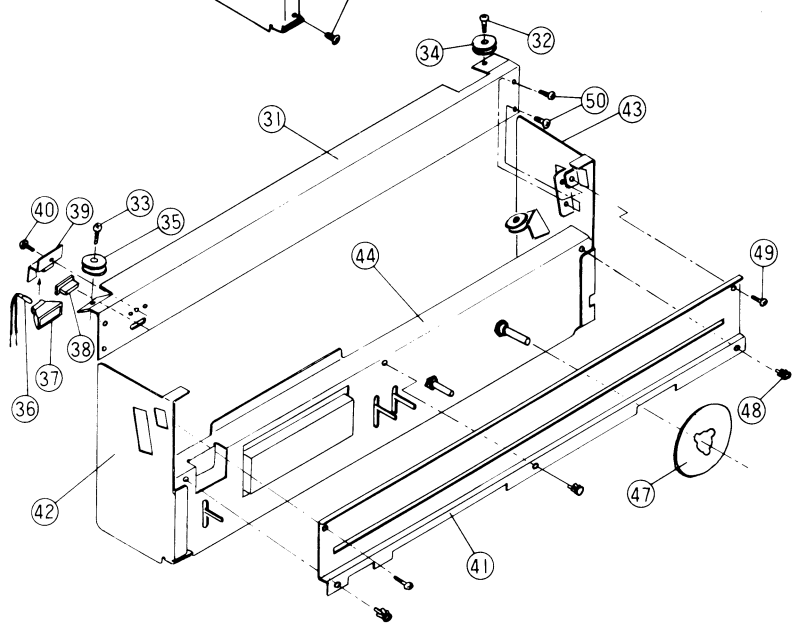


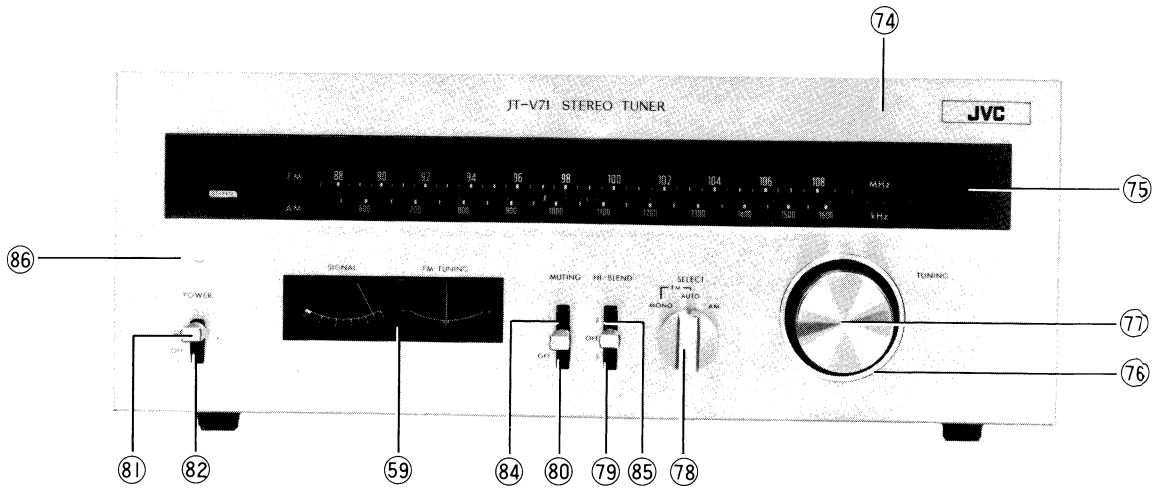
1. Rotate the tuning capacitor until its rotor fully enters inside the stator. Then start dial stringing with ①.
2. To set the angle θ , return the dial drum slightly from the position where cord ① separates from dial drum.

5. Exploded View and Parts List

5-(1) Front Panal





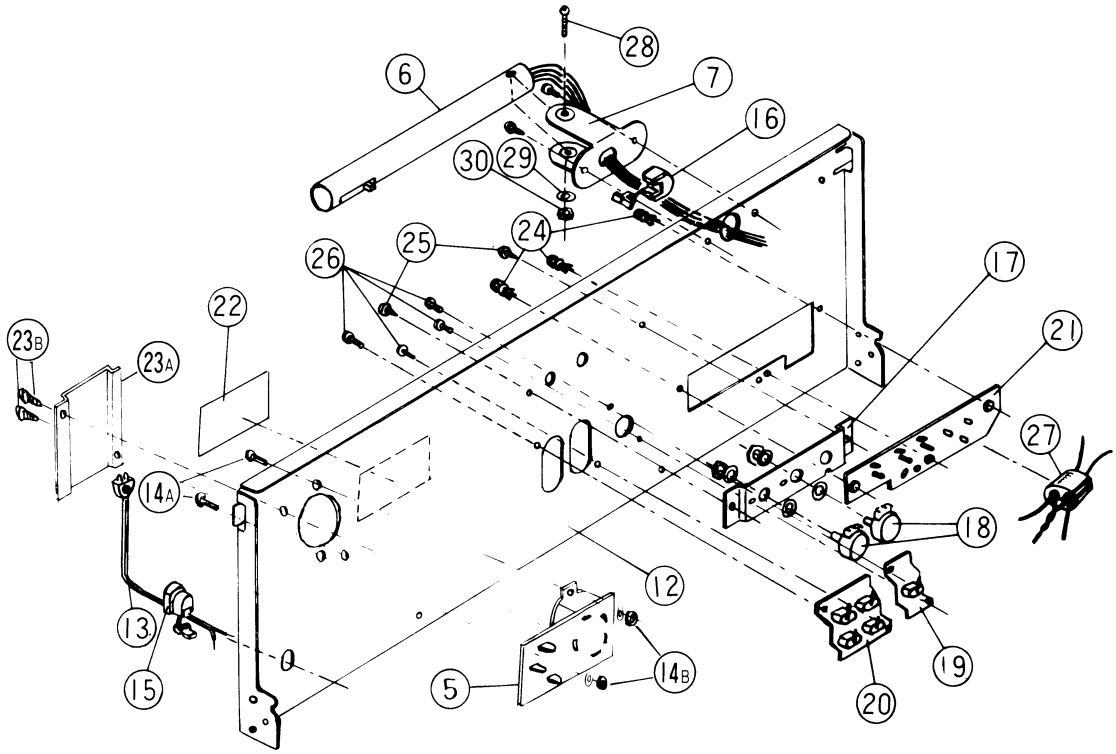


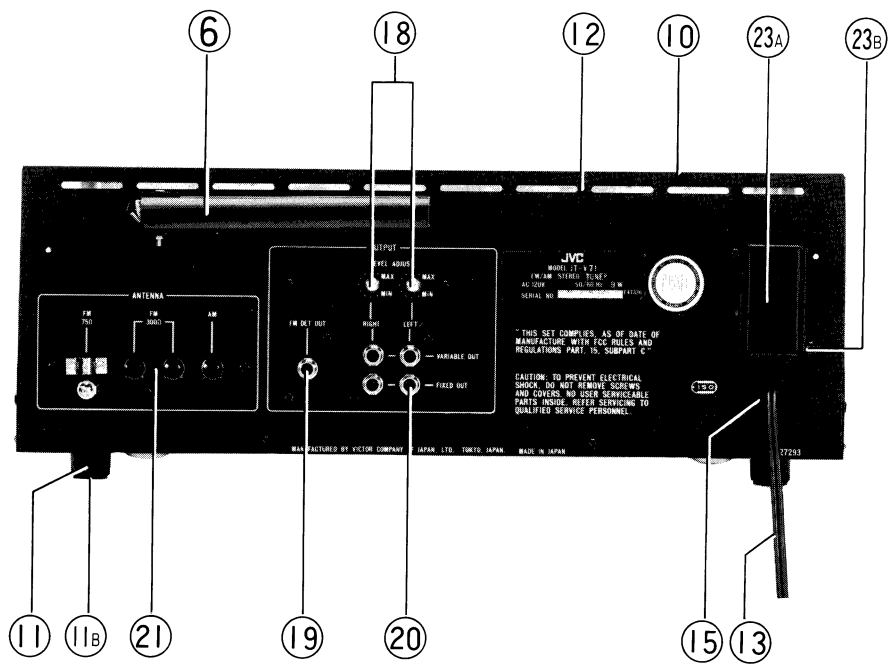
Parts List

Item No.	Part Number	Rating	Description	Q'ty
31	E21838-001		Needle Rail	1
32	E49447-001		Shaft Screw	1
33	E49447-001		Shaft Screw	1
34	E45017-001		Roller	1
35	E45017-001		Roller	1
36	QLP3105-001	35mA/6V	Pilot Lamp	1
37	E47754-001		Reflector	1
38	E60084-001		Stereo Indicator	1
39	E60085-001		Lamp Socket	1
40	SBSB3006Z		Screw	1
41	E21837-003		Dial Scale	1
42	E21841-001		Stay Bracket (left)	1
43	E21842-002		Stay Bracket (right)	1
44	E21836-001		Front Bracket	1
45				
46				
47	E60078-002		Spacer	1
48	E48729-002		Plastic Rivet	3
49	SBSB3006Z		Screw	2
50	SBSB3006Z		Screw	4
51	E60082-001		Flywheel } 54	1
52	E60080-001		Tuning Bracket } 54	1
53	E60081-001		Tuning Shaft } 54	1
54	E34138-001		Tuning Shaft Ass'y	1
55	SSSP3006NS		Screw	3
56	SSSP3006NS		Screw	4
57	SSSP3006NS		Screw	2
* 58	OSL2220-002		Power Switch	1
59	E03680-002		Tuning Meter	1
60	E60147-001		Meter Holder	1
61	E45204-006		Plate	2
62	E60166-001	100mA/6V	Lamp Ass'y	1
63	E48729-002		Plastic Rivet	1
64	E50670-003		Wire Clamp	1
65	SBSB3006Z		Screw	1
66	E50670-003		Wire Clamp	1
67	E46029-001		Rubber Bushing	1
68	QLP3105-001	35mA/6V	Pilot Lamp	1
69	SBSB3006Z		Screw	2
70	SBSB3006Z		Screw	2
71	E49447-001		Shaft Screw	1
72	E45017-001		Roller	1
73	SBSB3006Z		Screw	1
74	E21834-005		Front Panel Ass'y	1
75	E34137-002		Window Screen	1
76	E60079-001		Knob Escutcheon	1
77	E60039-002		Tuning Knob	1
78	E49976-001		Select Knob	1
79	E49977-002		Lever Knob	1
80	E49977-002		Lever Knob	1
81	E49977-002		Lever Knob	1
82	E49968-001		Lever Knob Escutcheon	1
84	E49968-002		Lever Knob Escutcheon	1
85	E49968-002		Lever Knob Escutcheon	1
86	E49969-001		Rabbit Eye	1

* Different in different areas. See page 24.

5-(2) Rear Panel



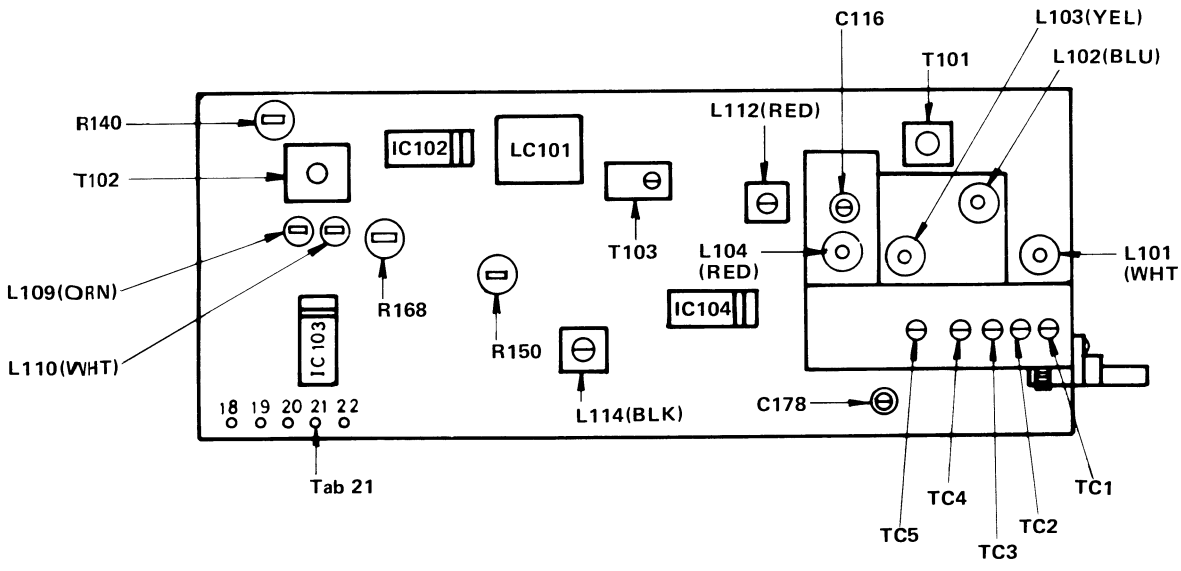


Parts List

Item No.	Part Number	Rating	Description	Q'ty
* 5	TSC-52A		Switch C.B Ass'y	1
6	E03037-31UD		Bar Antenna Coil	1
7	E49695-002		Bar Antenna Bracket	1
10	E21801-002		Top Cover	1
10B	E60134-002		Screw (for top cover)	4
10C	Q03093-108		Washer (for top cover)	4
11	E47227-005		Foot	4
11B	SBSB3016Z		Screw (for foot)	4
12	E21839-002		Rear Panel	1
* 13	QMP1200-244		Power Cord	1
14A	SPSP3008MS		Screw	2
14B	NTB3000NS		Nut & Washer	2
* 15	QHS3876-162		Cord Stopper	1
16	QHS3876-162		Cord Stopper	1
17	E48598-002		Bracket	1
18	E03415-001	50kΩ	Variable Resistor	2
19	E03591-10		Pin Jack	1
20	E03591-41C		Pin Jack	1
21	E03629-001		Antenna Terminal Board	1
* 22	E47330-197		Rating Lable	1
* 23-A	E60931-001		Cover (TSC-52)	1
* 23-B	SBSB3008M		Screw	2
24	E48729-001		Plastic Rivet	3
25	SBSB3008M		Screw	2
26	SPSD3008MS		Screw	4
27	E03177-002		Balun	1
28	SPSP3025NS		Screw	1
29	WLS3000N		Washer	1
30	NNZ3000NS		Nut	1

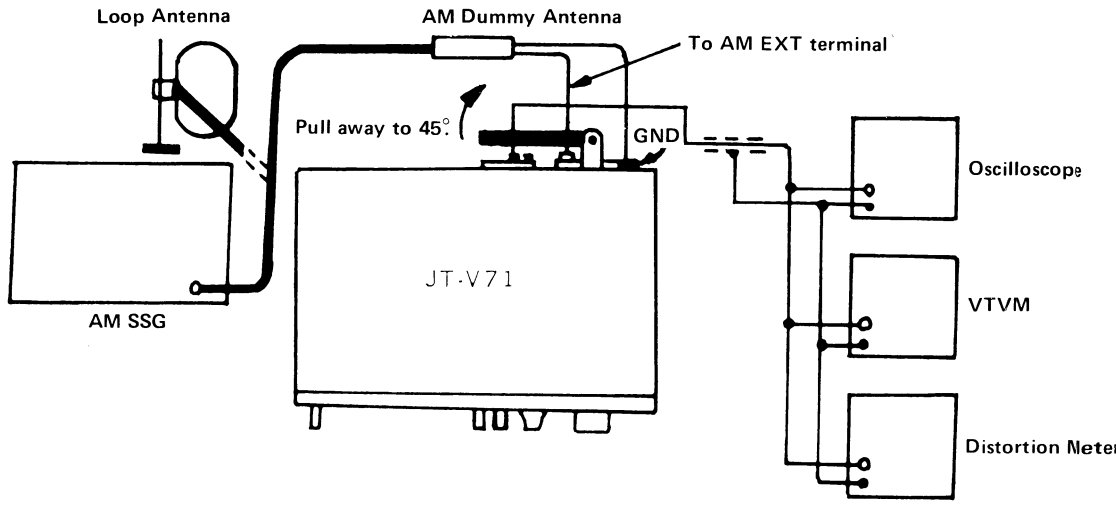
* Different in different areas. See page 24.

6. FM/AM Tuner Alignment Procedure



6-(1) AM Section

Connection



Tracking and Sensitivity

Low Frequency

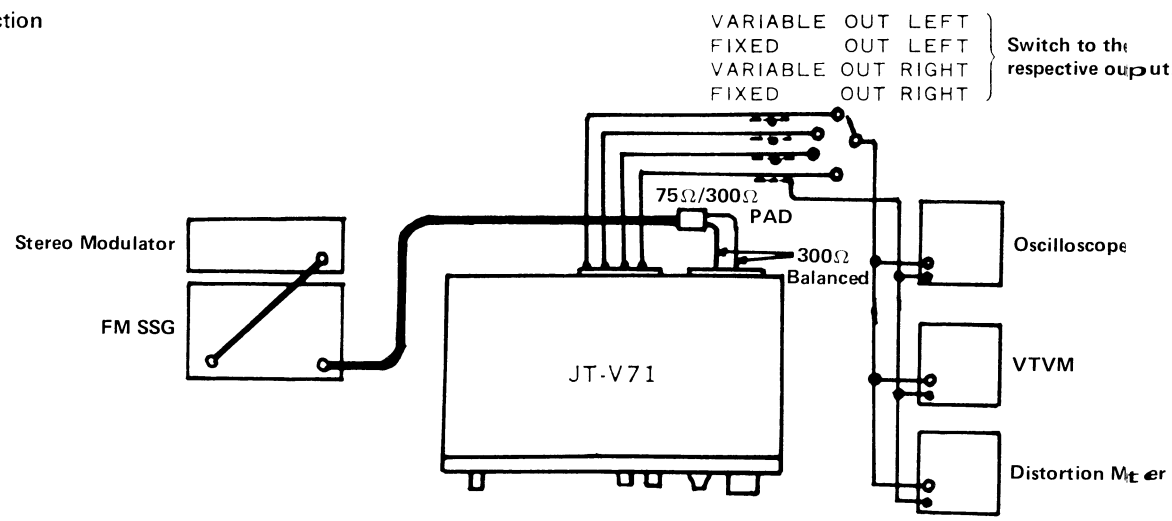
1. Connect an AM SSG to the antenna terminals on the rear panel, set this to 600kHz with 30% modulation at 400Hz.
2. Connect an AC VTVM and an oscilloscope to Fixed Out on the rear panel.
3. Set the dial pointer to 600kHz.
4. Adjust the osc. transformer L112 and the ferrite bar antenna to maximize the output signal.

High Frequency

5. Set the AM SSG to 1,400kHz with 30% modulation at 400Hz.
6. Set the dial pointer to 1,400kHz.
7. Adjust the trimmers TC4 and TC2 in the AM tuning gang so that the output signal is maximized.
8. Repeat these high and low frequency adjustments alternately until maximum sensitivity is obtained.

6-(2) FM Section

Connection



Discriminator, Center Meter & Distortion

1. Connect an FM SSG, 1kHz modulation and 75kHz deviation, to the antenna terminals on the rear panel through a dummy antenna.
2. Connect an oscilloscope, distortion meter and VTVM to the Fixed Out Jacks on the rear panel.
3. Tune to a frequency where there is no broadcasting.
4. Adjust the bottom core of T102 so that the center meter indicates "0" (zero).
5. Set the FM SSG to 98MHz.
6. Set the dial pointer to 98MHz.
7. Adjust the top core of T102 so that the distortion is minimized at a value less than 0.4%.

Tracking and Sensitivity

Low Frequency

1. Connect an FM SSG to the antenna terminals on the rear panel through a dummy antenna.
2. Set the FM SSG to 88MHz, a modulation of 1kHz and a deviation of 75kHz, to provide an input of 2μV.
3. Connect a VTVM and an oscilloscope to the Fixed Out Jacks on the rear panel.
4. Set the dial pointer to 88MHz.
5. Adjust five coils L104, L103, L102, L101 and T101 (top and bottom cores).

High Frequency

6. Set the FM SSG to 108MHz, a modulation of 1kHz and a deviation of 75kHz, to provide an input of 2μV.
7. Set the dial pointer to 108MHz.
8. Adjust the FM trimmers C114, TC5, TC3 and TC1 in the tuning gang to maximize the output.
9. Repeat these high and low frequency adjustments alternately until maximum sensitivity is obtained.

Note: After completion of this procedure, make sure that the center meter indicates proper position. Repeat steps 4 through 7 of the center meter adjustment, if it is not indicated properly.

Multiplex

1. Set a stereo modulator as follows: Modulation frequency 1,000Hz, Deviation pilot 7.5kHz, Main and Sub. 67.5kHz. Connect its output to an FM SSG.
2. Connect the FM SSG to the antenna terminals through a dummy antenna.
3. Connect a VTVM, an oscilloscope and a distortion meter to the Fixed Out Jacks.
4. Set the FM SSG to 98MHz and an output of 1mV.
5. Set the dial pointer to 98MHz.
6. Connect a frequency counter to Tab No. 29.
7. Switch off the pilot signal of the stereo modulator.
8. Adjust R168 so that the frequency counter indicates 19kHz (±0.1kHz).
9. If no frequency counter is available, there is another simplified method. Tune exactly to a stereo broadcast. Them turn R168 in either direction to find the range in which the stereo indicator lights up and fix R168 at the center of the range.

Stereo Separation

10. Switch the selector of the stereo modulator to left channel modulation.
11. Adjust R306 located on TAD-167C (Post Amp. C.B. Ass'y) so that the output of the right channel is minimized.
12. Switch the selector of the modulator to right channel modulation.
13. Adjust R306 so that the output of the left channel is minimized.
14. Set R306 to average, if the separations of right and left channels are different.

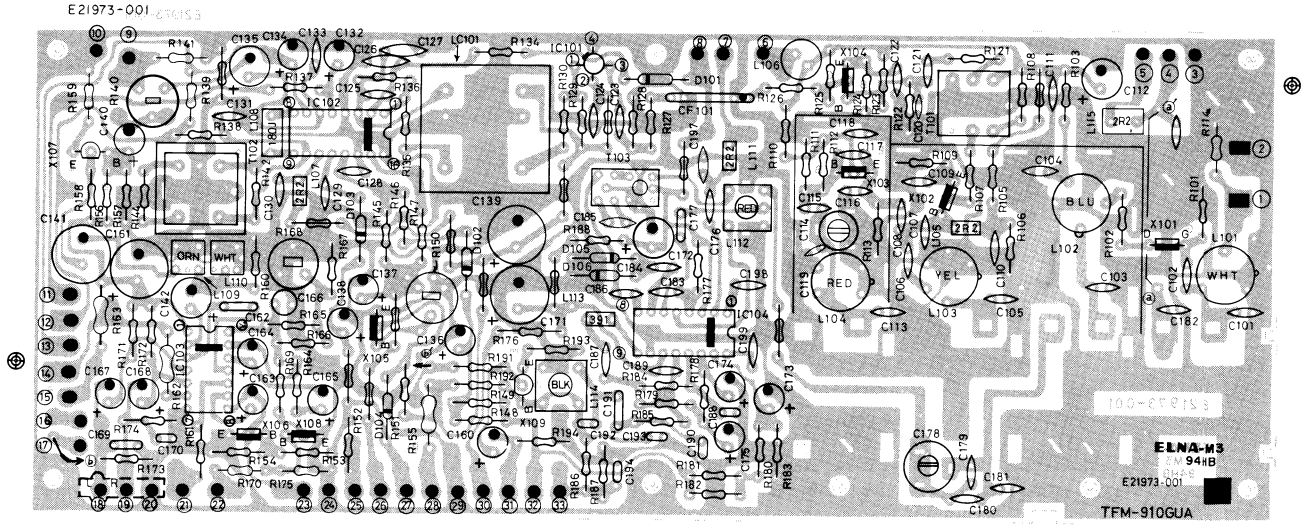
Note: Keep the HI-BLEND switch off during this adjustment procedure of stereo separation.

Muting Level

1. Connect a VTVM and an oscilloscope to the Fixed Out Jacks.
2. Set the FM SSG to 98MHz, a modulation of 1kHz and a deviation of 75kHz, to provide an input of 10μV.
3. Turn R150 clockwise with the MUTING switch at "1" and remember the point at which the muting ceases operating.
4. Turn R150 counterclockwise slightly so that the output level drops by 1dB.
5. Attenuate the output of the FM SSG to 2dB from 10μV of Step 2 and check that the muting is still operating.
6. Change the position of the MUTING switch to "2" and raise the antenna input to 32μV.
7. Adjust R403 (TSC-53A) in the same way as steps 3, 4 and 5 to set to 32μV.

7. Circuit Board Ass'y and Parts List

7-(1) TFM-910GUA1 FM/AM Tuner C.B. Ass'y



Transistor Voltages (in Volts)				
	G	S	D	
X101	0	0	10.5	
	B	C	E	
X102	1.6	11.2	0.9	
X103	5.7	10.0	5.1	
X104	4.0	10.3	3.4	
X105	0	3.3	0	No Signal
	0.7	0	0	1mV RF INPUT
X106	0.7	0	0	No Signal
	0	2.1	0	At MONO Position
X107	2.2	6.2	1.7	
X108	0	2.8	0	No Signal
	0.7	0.3	0	At AM Position
X301	2.1	7.5	1.75	
X302	2.1	7.5	1.75	
X303	0	0	0	No Signal & Muting OFF
X304	0.7	0	0	No Signal & Muting ON
	0	0	0	1mV RF Input & Muting ON
	0	0	0	1mV RF Input & Muting OFF
	0	0	0	At AM Position
X305	0	-5	+0.6	
X306	0	-5	+0.6	
X307	-5	+2.7	-11	
X308	-5	+2.7	-11	
X801	0.6	0	0	
X802	-12	-21	-0.4	
X803	-12.4	-25	-12	
X804	12.5	12	26	
X805	0.6	12.5	0	

IC Voltages (In Volts)			
	IC 101	IC 102	IC 103
Pin No.	HA1137W	HA1156W	HA1197
1	2.0	10.5	4.7
2	2.0	2.8	2.0
3	2.0	5.1	8.4
4	0	7.5	5.9
5	0 or 1.5	7.5	8.4
6	5.5	12 or 0.6	3.3
7	5.5	0	1.1
8	5.5	0 or 2.1	2.6
9	5.5	2.1	5.8
10	5.5	1.3	0
11	11.7	1.9	9.2
12	3.2 or 0	2.1	1.3
13	0 or 4.9	2.1	0.7
14	0	2.8 or 1.0	1.4
15	4.6		0
16	0		0.9

Note 1

	IC101 Pin 5	IC101 Pin 12	IC101 Pin 13
No Signal & Muting OFF	0	3.2	0
No Signal & Muting ON	1.5	3.2	0
1mV RF INPUT & MUTING ON	0	0	4.9
1mV RF INPUT & MUTING OFF	0	0	4.9

Note 2

	IC102 Pin 6	IC102 Pin 8	IC102 Pin 14
No Signal	12	0	2.8
1mV RF MONO INPUT/MONO Position	12	0	2.8
1mV RF MONO INPUT/AUTO Position	12	2.1	2.8
1mV RF STEREO INPUT/MONO Position	12	0	2.8
1mV RF STEREO INPUT/AUTO Position	0.6	2.1	2.8
At AM Position	12	2.1	3.6

Transistors

Item No.	Part Number	Rating		Description	Maker
		Pc	fT		
X101	2SK55D	IDSS: 14mA,	NF: 3,5dB (f=100MHz)	F.E.T.	Hitachi
X102	2SC535 (C)	100mW	700MHz	Silicon	"
X103	2SC1342 (B)	100mW	250MHz	"	"
X104	2SC535 (B)	100mW	700MHz	"	"
X105	2SC458 (C)	200mW	230MHz	"	"
X106	2SC458 (C)	200mW	230MHz	"	"
X107	2SC1775AV (F)	300mW	200MHz	"	"
X108	2SC458 (C)	200mW	230MHz	"	"

Integrated Circuits

Item No.	Part Number	Rating	Description	Maker
IC101	LA1221		I.C.	Hitachi
IC102	HA1137W	550mW	"	"
IC103	HA1156W	400mW	"	"
IC104	HA1197W		"	"

Filters

Item No.	Part Number	Rating	Description	Maker
CF101	EO3609-002R		Ceramic Filter	
LC101	EO3618-001		L.C. Filter	

Diodes

Item No.	Part Number	Rating	Description	Maker
D101	IS2473		Silicon	Toyo Dengu
D102	IS2473		"	
D103	IS2473		"	
D104	IS2473		"	
D105	IS2473		"	
D106	IS2473		"	

Coils

Item No.	Part Number	Rating	Description	Maker
L101	E03477-031		RF Coil (White)	
L102	E03477-036		" (Blue)	
L103	E03477-033		" (Yellow)	
L104	E03477-034		" (Red)	
L105	E03522-2R2KY	2.2μH	Choke Coil	
L106	E03566-223	22mH	Ferry Inductor	
L107	E03522-2R2KY	2.2μH	Choke Coil	
L108	E03522-180J	18μH	FM Detector Coil	
L109	E03406-002		Trap Filter (Orange)	
L110	E03406-003		" (White)	
L111	E03522-2R2KY	2.2μH	Choke Coil	
L112	E03079-29		AM OSC Coil (Red)	
L113	E03522-391KY	390μH	Choke Coil	
L114	E03407-005		Multiplex Coil (Black)	
L115	E03522-2R2KY	2.2μH	Choke Coil	
T101	E03134-023		FM I.F. Transformer	
T102	E03134-020B		"	
T103	E03613-003		AM I.F. Transformer	

Capacitors

Item No.	Part Number	Rating		Description	Maker
	QAA2245-001			Variable Tuning	
C101	QCS11HJ-150	15pF	50V	Ceramic	
C102	QCS11HJ-330	33pF	"	"	
C103	QCS11HJ-180	18pF	"	"	
C104	QCF11HP-223A	0.022μF	"	"	
C105	QCS11HJ-180	18pF	"	"	
C106	QCS11HJ-4RO	4pF	"	"	
C107	QCS11HJ-4RO	"	"	"	
C108	QCT05CH-2RO	2pF	50V	"	
C109	QCF11HP-223A	0.022μF	"	"	
C110	QCS11HJ-101	100pF	"	"	
C111	QCF11HP-223A	0.022μF	"	"	
C113	QCT05SH-220	22pF	"	"	
C114	QAT3001-014	6pF	"	Trimmer	
C115	QCT05CH-7RO	7pF	"	Ceramic	
C116	QCT05CH-100	10pF	"	"	
C117	QCT05CH-220	22pF	"	"	
C118	QCF11HP-223A	0.022μF	"	"	
C121	QCF11HP-223A	"	"	"	
C122	QCF11HP-223A	"	"	"	
C123	QCF11HP-223A	"	"	"	
C124	QCF11HP-223A	"	"	"	
C125	QCF11HP-223A	"	"	"	
C126	QCZ0107-473	0.047μF	25V	"	
C127	QCZ0107-473	"	"	"	
C128	QCS11HJ-151	150pF	"	"	
C129	QCF11HP-223A	0.022μF	"	"	
C130	QCF11HP-223A	"	"	"	
C131	QCF11HP-223A	"	"	"	
C132	QEB41EM-475	4.7μF	25V	L.L.C. Electrolytic	
C133	QCS11HJ-330	33pF	"	Ceramic	
C134	QEW41HA-105	1μF	"	Electrolytic	
C135	QEW41CA-226	22μF	16V	"	
C136	QEW41AA-476	47μF	10V	"	
C137	QEW41HA-474	0.47μF	50V	"	
C138	QEW41HA-105	1μF	"	"	
C139	QEW41CA-227	220μF	16V	"	
C140	QEW41CA-226	22μF	"	"	
C141	QEW41CA-107	100μF	"	"	
C142	QEB41EM-106	10μF	25V	L.L.C. Electrolytic	
C161	QEW41CA-227	220μF	16V	Electrolytic	
C162	QFM41HK-473	0.047μF	50V	Mylar	
C163	QEB41HM-105	1μF	"	L.L.C. Electrolytic	
C164	QEB41HM-224	0.22μF	"	"	
C165	QEB41EM-106	10μF	25V	"	
C166	QFS42BJ-471	470pF	125V	Polystyrene	
C167	QEB41HM-105	1μF	50V	L.L.C. Electrolytic	
C168	QEB41HM-105	"	"	"	
C169	QFM41HK-102	1000pF	"	Mylar	
C170	QFM41HK-102	"	"	"	
C171	QEW41CA-227	220μF	16V	Electrolytic	

Capacitors

Item No.	Part Number	Rating		Description
C172	QEW41CA-476	47μF	16V	Electrolytic
C173	QEW41AA-476	47μF	10V	"
C174	QEW41HA–105	1μF	50V	"
C175	QEW41CA-106	10μF	16V	"
C176	QCF11HP-223A	0.022μF	50V	Ceramic
C177	QFM41HK-103	0.01μF	"	Mylar
C178	QAT3001-006	50pF	"	Trimmer
C179	QCS11HJ-560	56pF	"	Ceramic
C180	QCS11HJ-271	270pF	"	"
C181	QCS11HJ-180	18pF	"	"
C183	QCF11HP-223A	0.022μF	"	"
C184	QCF11HP-223A	"	"	"
C185	QCS11HJ-470	47pF	"	"
C186	QCF11HP-223A	0.022μF	"	"
C187	QCS11HJ-331	330pF	"	"
C188	QFM41HK-102	1000pF	"	Mylar
C189	QCF11HP-223A	0.022μF	"	Ceramic
C190	QFM41HK-222	2200pF	"	Mylar
C191	QFM41HK-473	0.047μF	"	"
C192	QFM41HK-103	0.01μF	"	"
C193	QFM41HK-222	2200pF	"	"
C195	QCF11HP-223A	0.022μF	"	Ceramic
C197	QCS11HJ-470	47pF	"	"
C198	QCF11HP-223A	0.022μF	"	"
C199	QCZ0107-473	0.047μF	25V	"

Resistors

Item No.	Part Number	Rating		Description
R101	QRD181J-105	1MΩ	1/8W	Carbon
R102	QRD181J-820	82Ω	"	"
R103	QRD181J-820	"	"	"
R105	QRD181J-223	22kΩ	"	"
R106	QRD181J-392	3.9kΩ	"	"
R107	QRD181J-470	47Ω	"	"
R108	QRD181J-123	12kΩ	"	"
R109	QRD181J-102	1kΩ	"	"
R110	QRD181J-331	330Ω	"	"
R111	QRD181J-123	12kΩ	"	"
R112	QRD181J-822	8.2kΩ	"	"
R113	QRD181J-152	1.5kΩ	"	"
R114	QRD181J-682	6.8kΩ	"	"
R121	QRD181J-181	180Ω	"	"
R122	QRD181J-332	3.3kΩ	"	"
R123	QRD181J-562	5.6kΩ	"	"
R124	QRD181J-102	1kΩ	"	"
R125	QRD181J-271	270Ω	"	"
R126	QRD181J-221	220Ω	"	"
R127	QRD181J-181	180Ω	"	"
R128	QRD181J-331	330Ω	"	"
R129	QRD181J-102	1kΩ	"	"

Resistors

Item No.	Part Number	Rating		Description
R130	QRD181J-221	220Ω	1/8W	Carbon
R134	QRD181J-334	330kΩ	"	"
R135	QRD181J-271	270Ω	"	"
R136	QRD181J-391	390Ω	"	"
R137	QRD181J-123	12kΩ	"	"
R138	QRD181J-822	8.2kΩ	"	"
R139	QRD181J-271	270Ω	"	"
R140	QVP4A0B-223	22kΩ		Variable
R141	QRD181J-104	100kΩ	1/8W	Carbon
R142	QRD181J-562	5.6kΩ	"	"
R144	QRD181J-332	3.3kΩ	"	"
R145	QRD181J-332	3.3kΩ	"	"
R146	QRD181J-822	8.2kΩ	"	"
R147	QRD181J-683	68kΩ	"	"
R148	QRD181J-222	2.2kΩ	"	"
R149	QRD181J-682	6.8kΩ	"	"
R150	QVP4A0B-473	47kΩ		Variable
R151	QRD181J-223	22kΩ	1/8W	Carbon
R152	QRD181J-133	13kΩ	"	"
R153	QRD181J-103	10kΩ	"	"
R154	QRD181J-103	10kΩ	"	"
R155	QRD126J-100	10Ω	1/2W	UNF. C. Res.
R156	QRD181J-823	82kΩ	1/8W	Carbon
R157	QRD181J-273	27kΩ	"	"
R158	QRD181J-222	2.2kΩ	"	"
R159	QRD181J-102	1kΩ	"	"
R160	QRD181J-272	2.7kΩ	"	"
R161	QRD181J-105	1MΩ	"	"
R162	QRD126J-221	220Ω	1/2W	UNF. C. Res.
R163	QRD126J-101	100Ω	"	UNF. C. Res.
R164	QRD181J-102	1kΩ	1/8W	Carbon
R165	QRD181J-183	18kΩ	"	"
R166	QRD181J-394	390kΩ	"	"
R167	QRD181J-153	15kΩ	"	"
R168	QVP4A0B-472	4.7kΩ		Variable
R169	QRD181J-392	3.9kΩ	1/8W	Carbon
R170	QRD181J-103	10kΩ	"	"
R171	QRD181J-392	3.9kΩ	"	"
R172	QRD181J-392	"	"	"
R173	QRD181J-563	56kΩ	"	"
R174	QRD181J-563	"	"	"
R175	QRD181J-392	3.9kΩ	"	"
R176	QRD141J-221	220Ω	1/4W	"
R177	QRD181J-152	1.5kΩ	1/8W	"
R178	QRD181J-103	10kΩ	"	"
R179	QRD181J-103	"	"	"
R180	QRD181J-561	560Ω	"	"
R181	QRD181J-181	180Ω	"	"
R182	QRD181J-181	"	"	"
R184	QRD181J-331	330Ω	"	"
R185	QRD181J-272	2.7kΩ	"	"

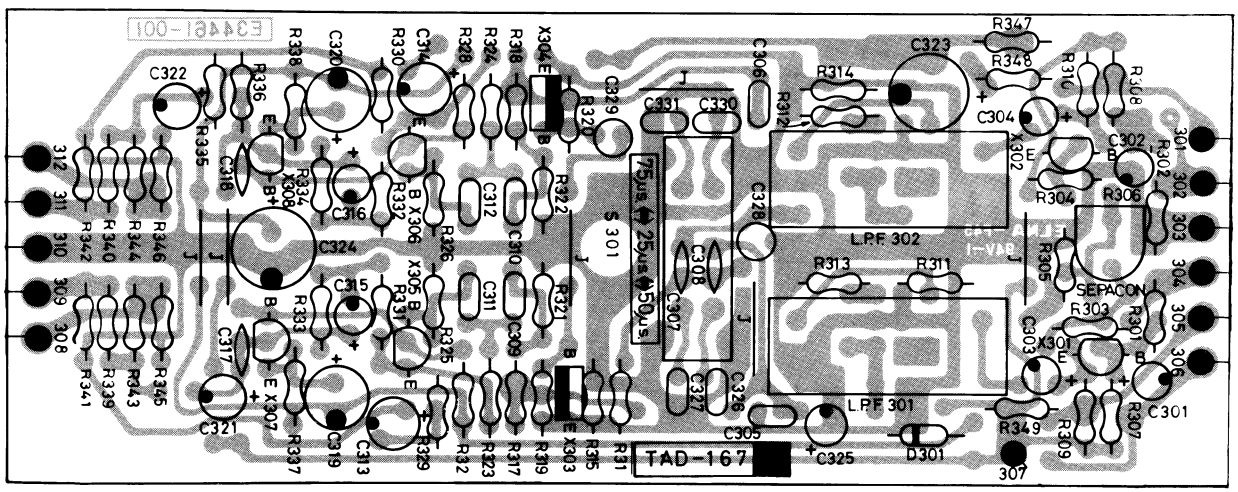
Resistors

Item No.	Part Number	Rating		Description
R186	QRD181J-333	33kΩ	1/8W	Carbon
R187	QRD181J-273	27kΩ	"	"
R188	QRD181J-151	150Ω	"	"

Others

Item No.	Part Number	Rating		Description
	E49829-002			Shield Case
	E60091-002			Shield Plate
	E60092-001			"

7-(2) TAD-167C Post Amp. C.B. Ass'y



Transistors

Item No.	Part Number	Rating		Description	Maker
		Pc	fT		
X301	2SC1775AV (F)	300mW	200MHz	Silicon	Hitachi
X302	2SC1775AV (F)	"	"	"	"
X303	2SC458 (C)	200mW	230MHz	"	"
X304	2SC458 (C)	200mW	230MHz	"	"
X305	2SA872AV (D)	300mW	200MHz	"	"
X306	2SA872AV (D)	"	"	"	"
X307	2SC1775AV (F)	"	"	"	"
X308	2SC1775AV (F)	"	"	"	"

Filters

Item No.	Part Number	Rating		Description	Maker
LPF301	E03427-001			Low Pass Filter	
LPF302	E03427-001			"	

Diode

Item No.	Part Number	Rating		Description	Maker
D301	IS2473			Silicon	Toyo Dengu

Capacitors

Item No.	Part Number	Rating		Description
C301	QEW41HA-225	2.2μF	50V	Electrolytic
C302	QEW41HA-225	"	"	"
C303	QEW41EA-475	4.7μF	25V	"
C304	QEW41EA-475	"	"	"
C305	QCS11HJ-221	220pF	50V	Ceramic
C306	QCS11HJ-221	"	"	"
C309	QFM41HK-104	0.1μF	"	Mylar
C310	QFM41HK-104	"	"	"
C311	QFM41HK-104	"	"	"
C312	QFM41HK-104	"	"	"
C313	QEB41EM-106	10μF	25V	L.L.C. Electrolytic
C314	QEB41EM-106	"	"	"
C315	QEB41HM-105	1μF	50V	"
C316	QEB41HM-105	"	"	"
C317	QCS11HJ-150	15pF	"	Ceramic
C318	QCS11HJ-150	"	"	"
C319	QEW41CA-476	47μF	16V	Electrolytic
C320	QEW41CA-476	"	"	"
C321	QEW41HA-225	2.2μF	50V	"
C322	QEW41HA-225	"	"	"
C323	QEW41CA-227	220μF	16V	"
C324	QEW41CA-227	"	"	"
C325	QEW41HA-105	1μF	50V	"
C326	QFM41HJ-392	3900pF	"	Mylar
C327	QFM41HJ-392	"	"	"
C328	QFM41HJ-122	1200pF	"	"
C329	QFM41HJ-122	"	"	"
C330	QFM41HJ-272	2700pF	"	"
C331	QFM41HJ-272	"	"	"

Resistors

Item No.	Part Number	Rating		Description
R301	QRD181J-333	33kΩ	1/8W	Carbon
R302	QRD181J-333	"	"	
R303	QRD181J-222	2.2kΩ	"	
R304	QRD181J-222	"	"	
R305	QRD181J-332	3.3kΩ	"	
R306	QVP8A0B-054	50kΩ		Variable
R307	QRD181J-124	120kΩ	"	Carbon
R308	QRD181J-124	"	"	"
R309	QRD181J-472	4.7kΩ	"	"
R310	QRD181J-472	"	"	"
R311	QRD181J-332	3.3kΩ	"	"
R312	QRD181J-332		"	"

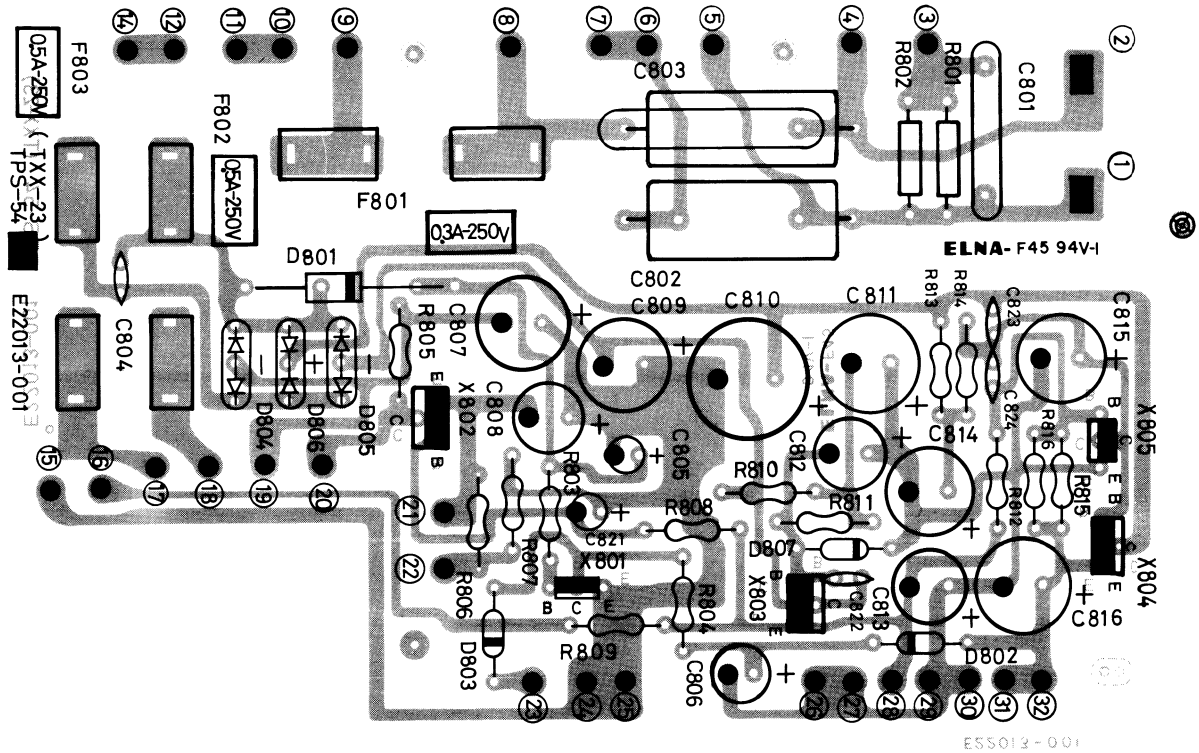
Resistors

Item No.	Part Number	Rating		Description
R313	QRD181J-183	18kΩ	1/8W	Carbon
R314	QRD181J-183	〃	〃	〃
R315	QRD181J-103	10kΩ	〃	〃
R315	QRD181J-103	10kΩ	〃	〃
R319	QRD181J-333	33kΩ	〃	〃
R320	QRD181J-333	〃	〃	〃
R323	QRD181J-124	120kΩ	〃	〃
R324	QRD181J-124	〃	〃	〃
R325	QRD181J-224	220kΩ	〃	〃
R326	QRD181J-224	〃	〃	〃
R327	QRD181J-823	82kΩ	〃	〃
R328	QRD181J-823	〃	〃	〃
R329	QRD181J-821	820Ω	〃	〃
R330	QRD181J-821	〃	〃	〃
R331	QRD181J-123	12kΩ	〃	〃
R332	QRD181J-123	〃	〃	〃
R333	QRD181J-153	15kΩ	〃	〃
R334	QRD181J-153	〃	〃	〃
R335	QRD181J-272	2.7kΩ	〃	〃
R336	QRD181J-272	〃	〃	〃
R337	QRD181J-182	1.8kΩ	〃	〃
R338	QRD181J-182	〃	〃	〃
R339	QRD181J-682	6.8kΩ	〃	〃
R340	QRD181J-682	〃	〃	〃
R343	QRD181J-682	〃	〃	〃
R344	QRD181J-682	〃	〃	〃
R345	QRD181J-472	4.7kΩ	〃	〃
R346	QRD181J-472	〃	〃	〃
R347	QRD141J-121	120Ω	1/4W	〃
R348	QRD141J-121	〃	〃	〃

Other

Item No.	Part Number	Rating		Description
S301	QSS2301-001			Slide Switch

7-(3) TPS-54A Power Supply C.B. Ass'y



Transistors

Item No.	Part Number	Rating		Description	Maker
		Pc	fT		
X801	2SC458 (C)	220mW	230MHz	Silicon	Hitachi
X802	2SB511 (E)	10W	8MHz	"	Sanyo
X803	2SB511 (E)	"	"	"	"
X804	2SD313 (E)	30W	"	"	"
X805	2SC1213A (C)	400mW	150MHz	"	Hitachi

Diodes

Item No.	Part Number	Rating		Description	Maker
D801	SiB01-02			Silicon	Kyodo Denki
D802	1S2473			"	Toyo Dengu
D803	1S2473			"	"
D804	ESAB02-02N			"	Kyodo Denki
D805	ESAB02-02N			"	"
D806	ESAB02-02C			"	"
D807	E0771-12			Zener Diode 13V	JRC

Capacitors

Item No.	Part Number	Rating		Description
* C803	QFH53AM-103	0.01μF	1000V	Metalized Mylar
C804	QCF11HP-103	"	50V	Ceramic
C805	QEW41HA-474	0.47μF	"	Electrolytic
C806	QEW41CA-476	47μF	16V	"
C807	QEW41VA-227	220μF	35V	"
C808	QEW41CA-227	"	16V	"
C809	QEW41VA-227	"	35V	"
C810	QEW41VA-477	470μF	"	"
C811	QEW41EA-107	100μF	25V	"
C812	QEW41CA-227	220μF	16V	"
C813	QEW41CA-227	"	"	"
C814	QEW41EA-227	"	25V	"
C815	QEW41CA-477	470μF	16V	"
C816	QEW41CA-477	"	"	"

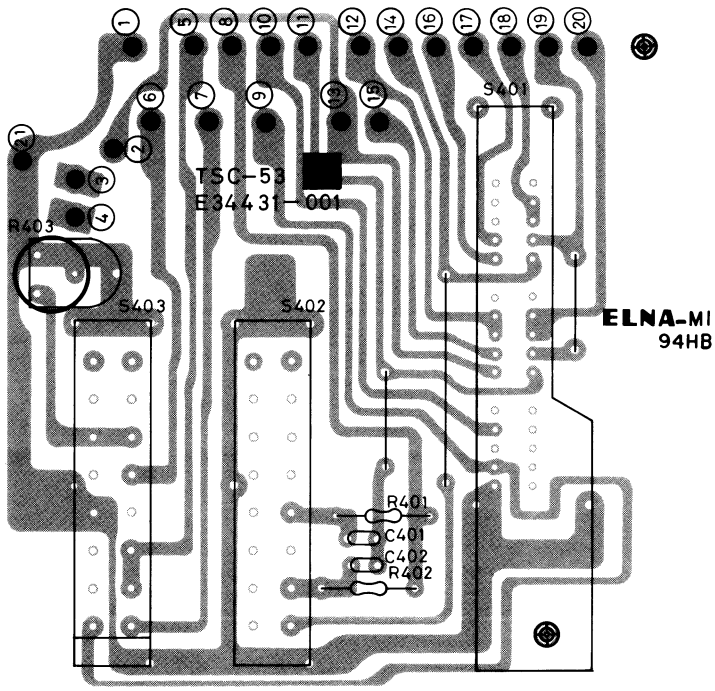
Resistors

Item No.	Part Number	Rating		Description
* R801	QRC121K-475E	4.7MΩ	1/2W	Composition
* R802	QRC121K-475E	"	"	"
R803	QRD141J-123	12kΩ	1/4W	Carbon
R804	QRD141J-153	15kΩ	"	"
R805	QRD141J-332	3.3kΩ	"	"
R806	QRD141J-332	"	"	"
R807	QRD126J-4R7	4.7Ω	1/2W	Unflamable Carbon
R808	QRD141J-332	3.3kΩ	1/4W	Carbon
R809	QRD126J-221	220Ω	1/2W	Unflamable Carbon
R810	QRD141J-272	2.7kΩ	1/4W	Carbon
R811	QRD141J-221	220Ω	"	"
R812	QRD141J-223	22kΩ	"	"
R813	QRD141J-152	1.5kΩ	"	"
R814	QRD141J-681	680Ω	"	"
R815	QRD141J-223	22kΩ	"	"
R816	QRD141J-154	150kΩ	"	"

Others

Item No.	Part Number	Rating		Description
* F801	QMF61U2-R30	0.3A	250V	Fuse
* F802	QMF61U2-R50	0.5A	"	"
* F803	QMF61U2-R50	"	"	"

7-(4) TSC-53A Switch C.B. Ass'y



Capacitors

Item No.	Part Number	Rating		Description
C401	QFM41HK-222	2200pF	50V	Mylar
C402	QFM41HK-123	0.012μF	"	"

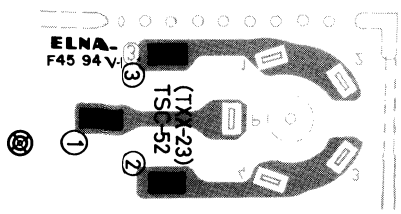
Resistors

Item No.	Part Number	Rating		Description
R401	QRD141J-105	1MΩ	1/4W	Carbon
R402	QRD141J-105	"	"	"
R403	QVP4A0B-472	4.7kΩ		Variable

Others

Item No.	Part Number	Rating		Description
S401	QSR0070-001			Rotary Slide Switch
S402	QSL4312-002			Lever Switch
S403	QSL4312-002			"

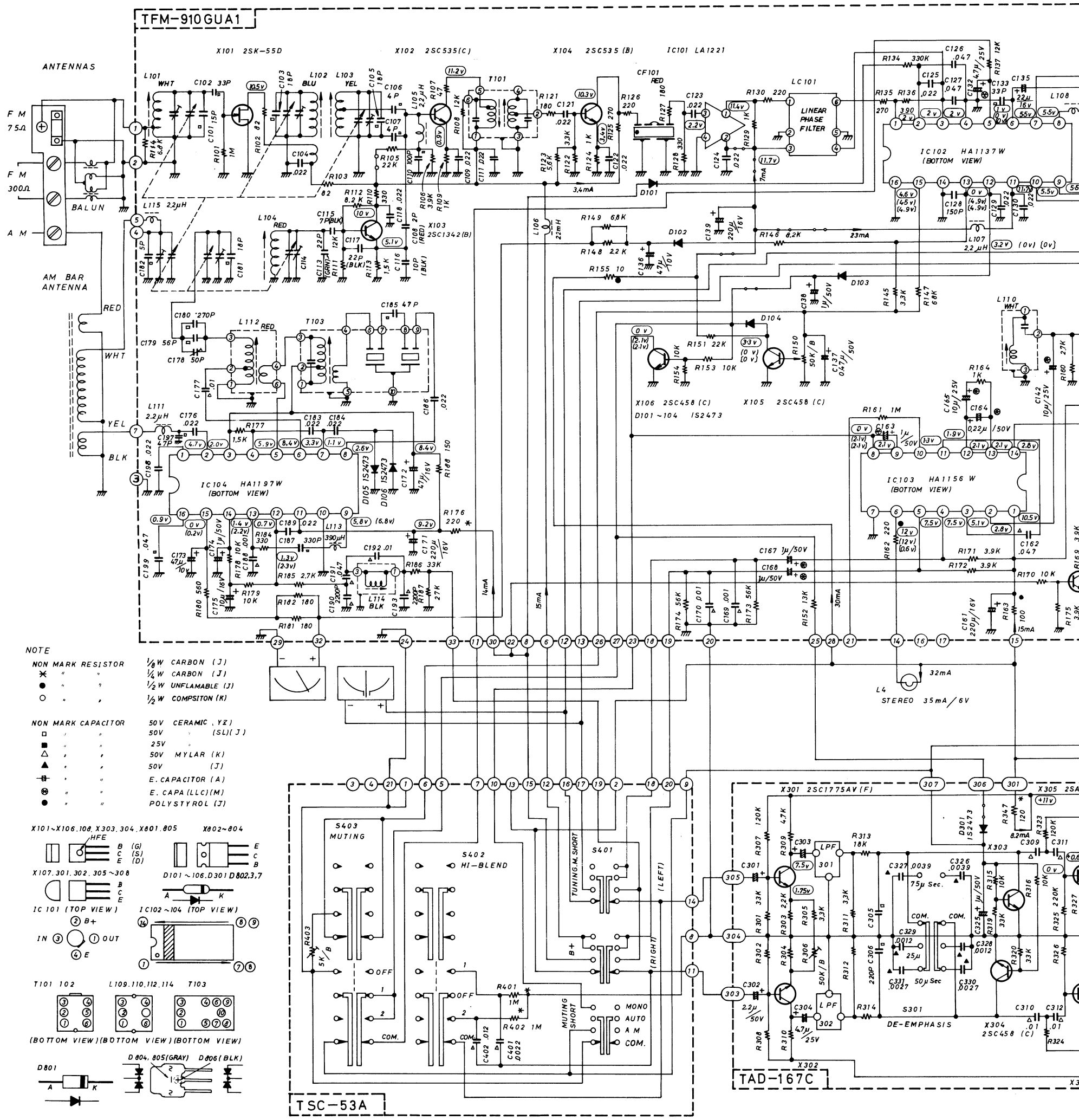
7-(5) TSC-52A Switch C.B. Ass'y



Others

Item No.	Part Number	Rating		Description
S901	QSR0074-001	2A	250V	Line Voltage Selector

8. Schematic Diagram



NOTE

NON MARK RESISTOR	1/8 W CARBON (J)
× " "	1/4 W CARBON (J)
● " "	1/2 W UNFLAMABLE (J)
○ " "	1/2 W COMPSITON (K)

NON MARK CAPACITOR	50V CERAMIC, Y5E)
□ " "	50V " (SL)(J)
■ " "	25V "
△ " "	50V MYLAR (K)
▲ " "	50V " (J)
⊣⊢ " "	E. CAPACITOR (A)
⊗ " "	E. CAPA (LLC)(M)
● " "	POLYSTYROL (J)

X101~X106, 108, X303, 304, X801, 805 — HFE, B (G), C (S), E (D)

X802~804 — E, C, B

X107, 301, 302, 305~308 — B, C, E

D101~106, D301, D802,3,7 — A, K

IC 101 (TOP VIEW) — ② B+, IN ③, ① OUT, ④ E

IC102~104 (TOP VIEW)

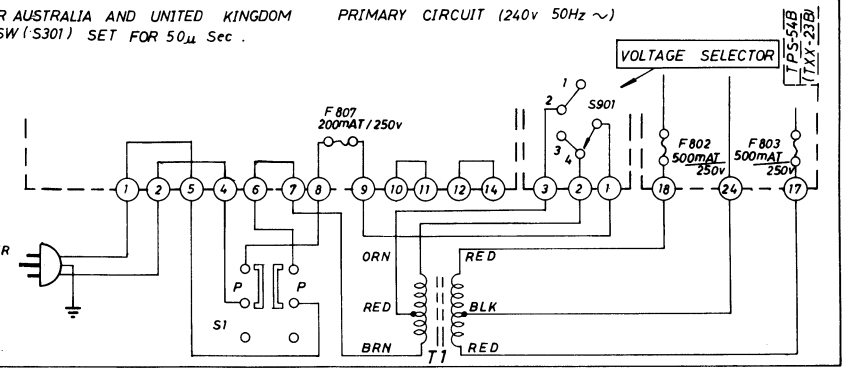
T101, 102 / L109, 110, 112, 114 / T103 (BOTTOM VIEW)

D801 — A, K

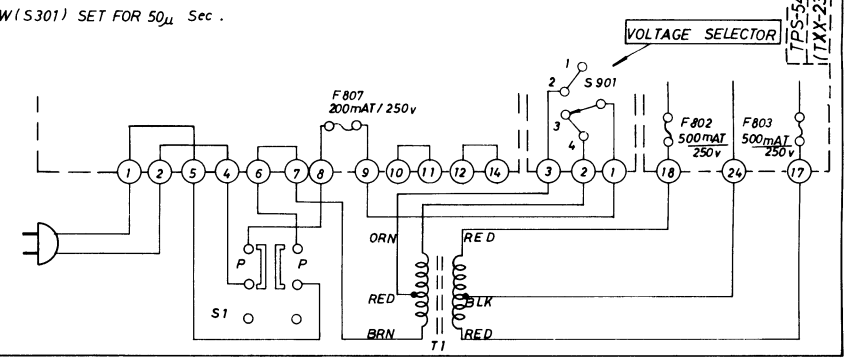
D804, 805 (GRAY); D806 (BLK)

NOTE : 1. FOR ALL VOLTAGE MEASUREMENTS LINE VOLTAGE = 120VAC
2. ⬭ INDICATES DC VOLTAGE MEASURED WITH DC VTVM TO CHASSIS WITH NO SIGNAL INPUT
3. ( ) INDICATES DC VOLTAGE WITH 1mV RF INPUT
4. [ ] INDICATES DC VOLTAGE WITH 1mV RF INPUT, 75KHz DEVIATION IN STEREO MODE

JT-V71(A)(B) FOR AUSTRALIA AND UNITED KINGDOM PRIMARY CIRCUIT (240v 50Hz ~)
DE-EMPHASIS SW(S301) SET FOR 50μ Sec.

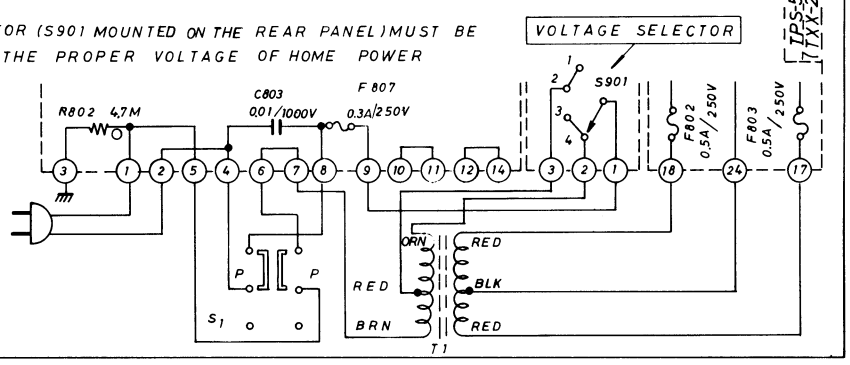


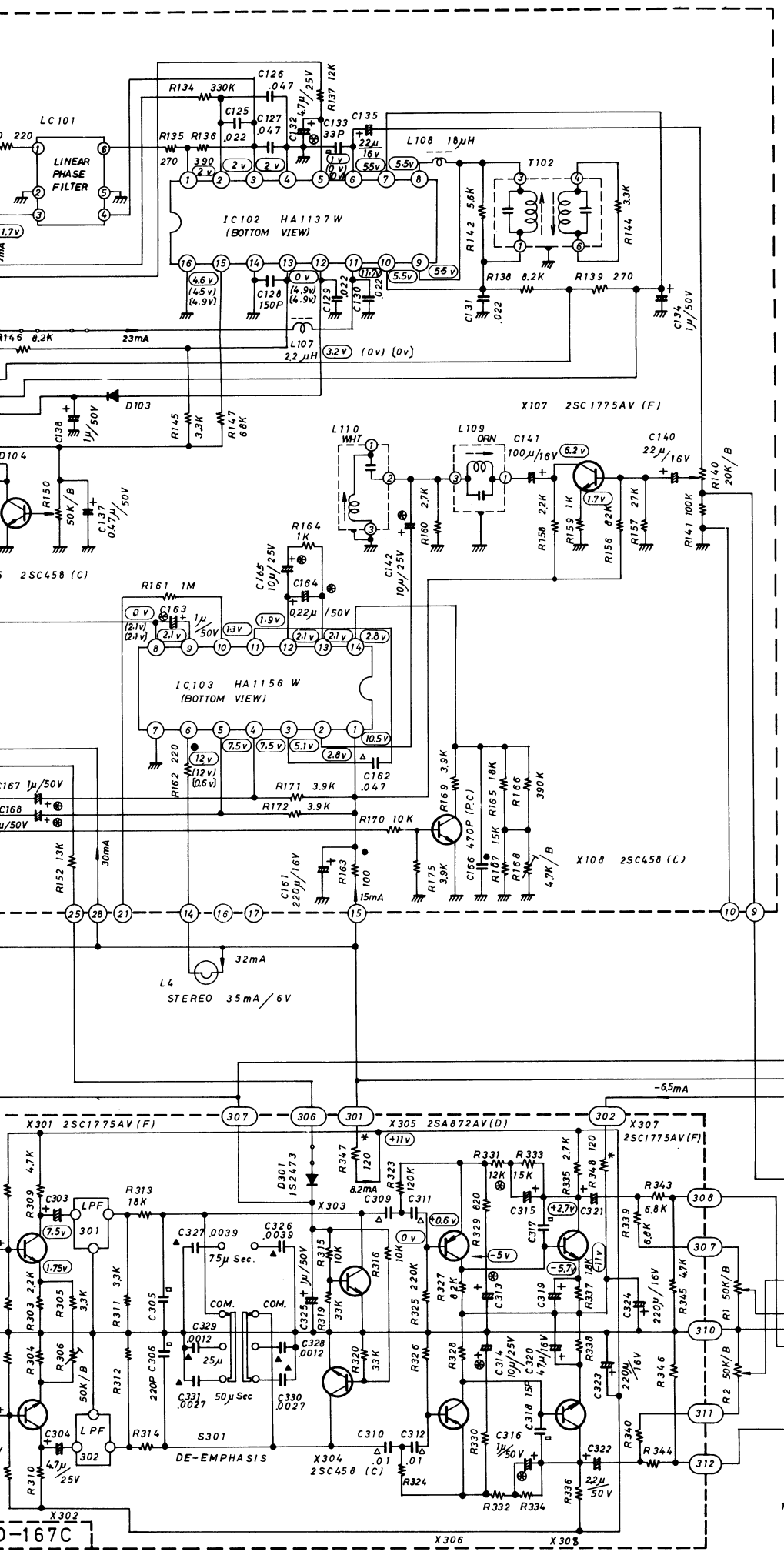
JT-V71(E) FOR EUROPE (SEMKO, SEV) PRIMARY CIRCUIT (220v 50Hz ~)
DE-EMPHASIS SW(S301) SET FOR 50μ Sec.



JT-V71(U) FOR THE UNIVERSAL USE, 75μ Sec REGION (SET S301 FOR 75μ Sec.)
JT-V71(F) FOR THE UNIVERSAL USE, 50μ Sec REGION (SET S301 FOR 50μ Sec.)
JT-V71(P) FOR PACEX and NEX (SET S301 FOR 75μ Sec.)

CAUTION;
VOLTAGE SELECTOR (S901 MOUNTED ON THE REAR PANEL) MUST BE ADJUSTED FOR THE PROPER VOLTAGE OF HOME POWER

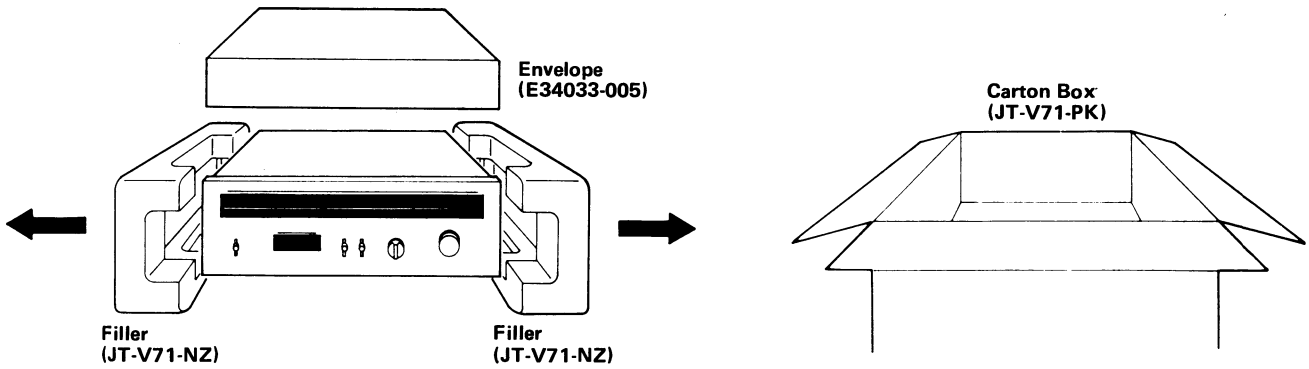




H NO SIGNAL INPUT

STEREO MODE

9. Packing Materials List



10. Accessories List

Part Number	Description	Q'ty
* E30580-494A	Instruction Book	1
E64207-002	Envelope for Accessories	1
* BT20020	Warranty Card	1
E03614-002	FM Antenna	1
E03479-001	Signal Cord	1

11. Parts List with Specified Numbers for Designated Areas

Page	Item No.	Description	Original (U.S.A. and Canada)	For Europe Sweden Norway Finland Switzerland Denmark	For U.K. and Australia	For Other Countries and PACEX
4	3	Power Supply C.B. Ass'y	TPS-54A	TPS-54B	TPS-54B	TPS-54C
20	C803	Metalized Mylar	QFH53AM-103	———	———	QFH53AM-103
20	R801	Composition	QRC121K-475E	———	———	QRC121K-475E
20	R802	"	"	———	———	———
20	F801	Fuse (Primary)	QMF61U2-R30	QMF51A2-R20	QMF51A2-R20	QMF61U2-R30
20	F802	Fuse (Secondary)	QMF61U2-R50	QMF51A2-R50	QMF51A2-R50	QMF61U2-R50
20	F803	"	QMF61U2-R50	QMF51A2-R50	QMF51A2-R50	QMF61U2-R50
4	5	Switch C.B. Ass'y	To set 120V	To set 220V	To set 240V	To set 110V, 120V, 220V, 240V. Each proper Voltage
7	23A	Cover (for TSC-52)	E60931-001	———	———	———
7	23B	Screw	SBSB3008M	———	———	———
4	8	Power Transformer	E03042-15F	E03042-15E	E03042-15E	E03042-15E
6	58	Power Switch	QSL2220-002	QSL2220-003	QSL2220-003	QSL2220-003
8	13	Power Cord	QMP1200-244	QMP3800-240 (Switzeland) E03544-001 (Sweden)	QMP9020-003 (U.K.) E03551-002 (Australia)	QMP1200-244
24		Instruction Book	E30580-494A	E30580-495A	E30580-495A	E30580-494A
24		Warranty Card	BT20020 (U.S.A.) BT20008 (Canada)		BT20013 (U.K.) (Australia)	BT20014C (PACEX only)
8	15	Cord Stopper	QHS3876-162	QHS3876-162	QHS3876-162 (U.K.) QHS6374-162 (A)	QHS3876-162